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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,686	04/21/2006	Akihiro Tadamasu	500.46139X00	7207
20457 7590 05/16/2007 ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			EXAMINER ROJAS, PEDRO A	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,686

Applicant(s)

TADAMASA, AKIHIRO

Examiner

Pedro A. Rojas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/21/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/21/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 rejected under 35 U.S.C. 103(a) as being obvious over Masahiro Yoshii (hereafter “Yoshii”)—U.S. Patent No.: 6,851,613 B2—in view of Takita et al. (hereafter “Takita”)—Patent Application Publication No.: US 2005/0218227 A1.

The applied reference (Yoshii) has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

2. **Regarding Claim 1:** Yoshii discloses a card-processing device. Yoshii specifically states that whereof a *first* magnetic card 10 (as shown in FIG. 2) may be processed on processor 1 of FIG. 1, other cards may also be processed using the disclosed card-processing device. For

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example, the card 10 may also be a *second* card having an IC chip. See C6:L15-21. FIG. 2 is a view schematically illustrating of the card processing device comprising:

- (i) means for transporting cards; on FIG. 2, see reference numerals 14 to 17 which denote pairs of carrier rollers for holding and carrying a card 10 (C5:L45-46);
- (ii) control means for controlling said transportation means. See C5:L53-56; the carrier rollers 14 to 17 are driven by a single motor. The card carriage control unit 4 controls the rotation of the motor—inclusive of rotation and speed—and the stop thereof;
- (iii) wherein, when a card is taken in and/or ejected, said control means controls said transportation means in such a way that the card is intermittently transported. See FIGs. 5a-5d (for card take in operation) and FIGs. 7a-7d (for card eject operations) along with corresponding descriptive text.

Yoshii does not expressly disclose control means for controlling the transportation means according to the type of card, and also fails to disclose a second card—on which magnetic information is not recorded—being continuously transported.

Takita discloses a card-processing device wherein a plurality of inlet sensors 10, 20 (FIGs. 42-43), and 40 (not shown) have been implemented for detecting the type of card to be processed. See ¶s 0226-0231 on page 17, whereon the card-type determination process is explained. Takita teaches that a magnetic card, a contact IC card, a contact-less IC card, and a magnetic/contact-less common card may be detected. Takita also discloses that when a sense signal indicative of the proper card has been detected, the card and the motor of the transport driving means are driven. If the detected card is an IC card, the card feed rollers 5a and 5c of FIG. 42 are *continually rotationally driven* to cause the IC card 3 to travel. See ¶ 00186. On the

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other hand, when a magnetic card has been detected, the motor of the transport driving means is driven, thereby the card feed rollers 5a and 5c are rotationally driven and the magnetic card is transported. Either card is transported onto the card transport path 4 by being passed through shutter means 30. See ¶ 0190. After the termination of the card read/write operation, the rotational driving direction of the card feed rollers 5a and 5c is reversed, whereby the card in the card transport path 4 is transported in the reverse direction and led to the card insertion slot 2 for withdrawal. See ¶ 0192.

Yoshii and Takita teach analogous art—device for processing magnetic and/or IC cards. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takita with the invention of Yoshii for the benefit of advantageously using a device capable of reliably processing the various types of cards available in the fields of apparatuses such as ATMs, automatic vending machines, etc. See Takita ¶ 0005. Furthermore, those of ordinary skill in the art would be motivated to combine the above teachings because enhanced security and faster processing times may be achieved. For example, Takita ¶ 0015 mentions to enable favorably prevention of erroneous operations and damage.

3. **Regarding Claim 2:** Yoshii in view of Takita teach that which is discussed in reference to claim 1 above. Yoshii further teaches that when a card is taken in and if the card inserted from a card insertion slot is a magnetic stripe card, said transportation means takes in the card by intermittently transporting the card to a predetermined position and, from the predetermined position, by continuously transporting said card. See C6:L57-C7:L54 and FIGs. 4, 5a-5d. The intermittent carriage starts when leading edge of card 10 is detected by sensor 21 until the card is

no longer detected by sensor 12. Thereon, starts the constant-speed carriage to carry the card 10, wherein said constant-speed is kept until the leading end of card 10 is detected by sensor 24.

4. **Regarding Claim 3:** Yoshii in view of Takita teach that which is discussed in reference to claim 1 above. Yoshii further teaches that when a card is ejected the transportation means ejects the card by continuously transporting the card to a predetermined position and, from the predetermined position, by intermittently transporting the card. For example, Yoshii teaches the operation for discharging the card 10 as illustrated in FIGs. 6, 7a-7d. The card processor 1 carries the card 10 from the storage position (FIG. 7a) in the direction of discharge by rotating the carrier rollers 14 to 17 in a direction (reverse direction) in which the card is discharged. When the card 10 is detected by the sensor 21 constant-speed ends. Thereon, the card is intermittently discharged by rotating the carrier rollers 14 to 17 until sensor 21 no longer detects the presence of card 10 (FIG. 7d).

5. **Regarding Claim 4:** Yoshii in view of Takita teach that which is discussed in reference to claim 1 above. Yoshii further teaches when a card is taken in, the card is inserted from a card insertion slot, said transportation means takes in the card by intermittently transporting the card to a first position in a main body of said card processing device and, from the first position, by continuously transporting the card. When a card is ejected said transportation means ejects the card by continuously transporting the card to a second position near the card insertion slot and, from the second position, by intermittently transporting the card. For instance, Yoshii teaches card 10 is inserted through slot 11. Transportation means (rollers 14-17) intermittently transport card 10 from a first position in the main body of processor 1 (when the leading edge of card 10 is detected by sensor 21) until the card is no longer detected by sensor 12. Thereon, starts the

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constant-speed carriage to carry the card 10, wherein said constant-speed is kept until the leading end of card 10 is detected by sensor 24. When the card is ejected, transportation means (rollers 14-17) rotate in the reverse direction transporting card 10 in a constant-speed from the storage position until the back edge of card 10 is detected by sensor 12 (second position near the card insertion slot). From the second position, the card is intermittently discharged by rotating the carrier rollers 14 to 17 until sensor 21 no longer detects the presence of card 10 (FIG. 7d). For take in and eject process, applicant's attention is directed to FIGs. 4, 5a-5d, 6, 7a-7d, and corresponding text on C6:L34 thru C8:L30.

6. **Regarding Claims 5 and 7:** Yoshii discloses a card-processing device. Yoshii specifically states that whereof a *first* magnetic card 10 (as shown in FIG. 2) may be processed on processor 1 of FIG. 1, other cards may also be processed using the disclosed card-processing device. For example, the card 10 may also be a *second* card having an IC chip. See C6:L15-21. FIG. 2 is a view schematically illustrating of the card processing device comprising:

- (i) means for transporting cards; FIG. 2 shows reference numerals 14 to 17 which denote pairs of carrier rollers for holding and carrying a card (C5:L45-46);
- (ii) reception means for receiving a type of a card from a higher-level device^[1]. Yoshii discloses card processor unit 1 according to FIG. 1. The card processor 1 is incorporated in such apparatuses as ATM, cash dispenser, and the like. In FIG. 2, reference numeral 10 denotes a type of card, and numeral 11 denotes an insertion port (*reception means*) for inserting card 10. The insertion port 11 is positioned in the front surface of the higher-level apparatus in which card processor 1 is incorporated. C5L30-44.

[1] According to applicant's definition, a higher-level device is an automated teller machine (ATM) on which a card-processing device is mounted. See page 20: L2-3 of instant application.

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(iii) control means for controlling said transportation means. See C5:L53-56; the carrier rollers 14 to 17 are driven by a single motor. The card carriage control unit 4 controls the rotation of the motor—inclusive of rotation and speed—and the stop thereof;

(iv) the reception means receives the type of card from the higher-level device before the card is taken into the main body of said card processing device. Yoshii describes that the card is taken into the main body of the processing device through the insertion port 11. When the card 10 is to be inserted in the main body of the processor, sensor 12 detects the leading edge of the card; and subsequently, the carrier rollers 14 to 17 start rotating in the forward direction towards the main body of processor 1. See C6:L30-39.

(vi) control means controls said transportation means in such a way the card received by said reception means is intermittently transported into the main body of the processing device. See FIGs. 5a-5d (for card take-in operation) along with corresponding descriptive text on C6:L30 thru C7:L4.

(vii) when the card is ejected said transportation means intermittently transports the card (*limitation of claim 7*). Yoshii discloses the operation for discharging the card 10 as illustrated in FIGs. 6, 7a-7d. The card processor 1 carries the card 10 from the storage position (FIG. 7a) in the direction of discharge by rotating the carrier rollers 14 to 17 in a direction (reverse direction) in which the card is discharged. When the card 10 is detected by the sensor 21 constant-speed ends. Thereon, the card is intermittently discharged by rotating the carrier rollers 14 to 17 until sensor 21 no longer detects the presence of card 10 (FIG. 7d).

Regarding Claims 5 and 7, Yoshii does not expressly disclose control means for controlling the transportation means according to the type of card, and also fails to disclose a second card—on which magnetic information is not recorded—being continuously transported.

Takita discloses a card-processing device wherein a plurality of inlet sensors 10, 20 (FIGs. 42-43), and 40 (not shown) have been implemented for detecting the type of card to be processed. See ¶s 0226-0231 on page 17, whereon the card-type determination process is explained. Takita teaches that a magnetic card, a contact IC card, a contact-less IC card, and a magnetic/contact-less common card may be detected. Takita also discloses that when a sense signal indicative of the proper card has been detected, the card and the motor of the transport driving means are driven. If the detected card is an IC card, the card feed rollers 5a and 5c of FIG. 42 are *continually rotationally driven* to cause the IC card 3 to travel. See ¶ 00186. On the other hand, when a magnetic card has been detected, the motor of the transport driving means is driven, thereby the card feed rollers 5a and 5c are rotationally driven and the magnetic card is transported. Either card is transported onto the card transport path 4 by being passed through shutter means 30. See ¶ 0190. After the termination of the card read/write operation, the rotational driving direction of the card feed rollers 5a and 5c is reversed, whereby the card in the card transport path 4 is transported in the reverse direction and led to the card insertion slot 2 for withdrawal. See ¶ 0192.

Yoshii and Takita teach analogous art—device for processing magnetic and/or IC cards. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takita with the invention of Yoshii for the benefit of advantageously using a device capable of reliably processing the various types of cards available in the fields of

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apparatuses such as ATMs, automatic vending machines, etc. See Takita ¶ 0005. Furthermore, those of ordinary skill in the art would be motivated to combine the above teachings because enhanced security and faster processing times may be achieved. For example on ¶ 0015, Takita mentions to enable favorably prevention of erroneous operations and damage.

7. **Regarding Claim 6:** Yoshii discloses a card-processing device. Yoshii specifically states that whereof a magnetic card 10 (as shown in FIG. 2) may be processed on processor 1 of FIG. 1, other cards may also be processed using the disclosed card-processing device. For example, the card 10 may also be a card having an IC chip. See C6:L15-21. FIG. 2 is a view schematically illustrating of the card processing device comprising:

(i) means for transporting cards; see reference numeral 14 to 17 which denote pairs of carrier rollers for holding and carrying a card (C5:L45-46);

(ii) detection means provided near a card insertion slot. Yoshii discloses detector 12 near insertion slot 11. See FIG. 2.

(iii) control means controls said transportation means in such a way the card received by said reception means is intermittently transported into the main body of the processing device. See FIGs. 5a-5d (for card take-in operation) along with corresponding descriptive text on C6:L30 thru C7:L4.

Yoshii does not expressly disclose control means for controlling the transportation means according to the type of card, wherein the control means acquires the type of the card from the detection means before the card is take into the main body of the card-processing device. Yoshii also fails to disclose a second card being continuously transported.

Takita discloses a card-processing device wherein a plurality of inlet sensors 10, 20 (FIGs. 42-43), and 40 (not shown) have been implemented for detecting the type of card to be processed. See ¶s 0226-0231 on page 17, whereon the card-type determination process is explained. Takita teaches that a magnetic card, a contact IC card, a contact-less IC card, and a magnetic/contact-less common card may be detected before the card is taken into the main body of the card-processing device. Takita discloses that when a sense signal indicative of the proper card has been detected, the card and the motor of the transport driving means are driven. If the detected card is an IC card (*second card*), the card feed rollers 5a and 5c of FIG. 42 are *continually rotationally driven* to cause the IC card 3 to travel. See ¶ 00186. On the other hand, when a magnetic card has been detected, the motor of the transport driving means is driven, thereby the card feed rollers 5a and 5c are rotationally driven and the magnetic card is transported. Either card is transported onto the card transport path 4 by being passed through shutter means 30 after being received thru insertion slot 2. See ¶ 0190. After the termination of the card read/write operation, the rotational driving direction of the card feed rollers 5a and 5c is reversed, whereby the card in the card transport path 4 is transported in the reverse direction and led to the card insertion slot 2 for withdrawal. See ¶ 0192.

Yoshii and Takita teach analogous art—device for processing magnetic and/or IC cards. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takita with the invention of Yoshii for the benefit of advantageously using a device capable of reliably processing the various types of cards. For example on ¶ 0015, Takita mentions that detecting a proper type of card prior to inserting into a card-processing device would enable favorably prevention of erroneous operations and damage.

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8. **Regarding Claim 8:** Yoshii discloses a card-processing device. Yoshii specifically states that whereof a magnetic card 10 (as shown in FIG. 2) may be processed on processor 1 of FIG. 1, other cards may also be processed using the disclosed card-processing device. For example, the card 10 may also be a card having an IC chip. See C6:L15-21. FIG. 2 is a view schematically illustrating of the card processing device comprising:

(i) first reading means. Card data reader unit 3 (shown in FIG. 1) for reading the card data recorded in the card 10 inserted in the main body of card-processing device 1; see C5:L18-29.

(ii) second reading means. Yoshii further discloses that additionally to a magnetic strip card 10, an IC chip card may be processed. In this case, the main body of the card processor 1 may be provided with a contact point which may be electrically connected to the IC chip to read the data recorded in said IC chip. See C6:L13-21.

(iii) means for transporting cards; see reference numeral 14 to 17 which denote pairs of carrier rollers for holding and carrying a card (C5:L45-46);

(iv) control means for controlling said transportation means. See C5:L53-56; the carrier rollers 14 to 17 are driven by a single motor. The card carriage control unit 4 controls the rotation of the motor—inclusive of rotation and speed—and the stop thereof;

(v) when a card is taken in and/or ejected, said control means controls said transportation means in such a way the card is intermittently transported. See FIGs. 5a-5d (for card take in operation) and FIGs. 7a-7d (for card eject operations) along with corresponding descriptive text.

Yoshii does not expressly disclose that control means controls the transportation means at the same time of determining the type of the card that is taken in based on a result of the reading means. Yoshii also fails to disclose a second card being continuously transported.

Takita discloses a card-processing device wherein a plurality of inlet sensors 10, 20 (FIGs. 42-43), and 40 (not shown) have been implemented for detecting the type of card to be processed. See ¶s 0226-0231 on page 17, whereon the card-type determination process is explained. Takita teaches that a magnetic card, a contact IC card, a contact-less IC card, and a magnetic/contact-less common card may be detected before the card is taken into the main body of the card-processing device. Takita discloses that when a sense signal indicative of the proper card has been detected, the card and the motor of the transport driving means are driven. If the detected card is an IC card (*second card*), the card feed rollers 5a and 5c of FIG. 42 are *continually rotationally driven* to cause the IC card 3 to travel. See ¶ 00186. On the other hand, when a magnetic card has been detected, the motor of the transport driving means is driven, thereby the card feed rollers 5a and 5c are rotationally driven and the magnetic card is transported. Either card is transported onto the card transport path 4 by being passed through shutter means 30 after being received thru insertion slot 2. See ¶ 0190. After the termination of the card read/write operation, the rotational driving direction of the card feed rollers 5a and 5c is reversed, whereby the card in the card transport path 4 is transported in the reverse direction and led to the card insertion slot 2 for withdrawal. See ¶ 0192.

Yoshii and Takita teach analogous art—a card-processing device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement reading means for a magnetic and non-magnetic card, as well as a card-type detector as taught by Takita in the invention of Yoshii thereby enabling the use of various types of cards, as well as preventing the use of counterfeit (not the correct type) cards. Takita states that it would be convenient and advantageous to process various types of cards in a single card-processing device

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because in the fields of apparatuses such as ATMs, automatic vending machines, ticket vending machines, and the like, there is a wide use of card readers.

9. **Regarding Claim 9:** Yoshii in view of Takita teach that which has been discussed in reference to claim 8 above. Yoshii further teaches when the card is exposed outside the main body of said card processing device, said transportation means intermittently transports the card and, when the card is not exposed outside the main body of said card processing device, continuously transports the card. See C6:L57-C7:L54 and FIGs. 4, 5a-5d. The intermittent carriage starts when leading edge of card 10 is detected by sensor 21 (card is exposed outside of main body: see FIG. 5B) until the card is no longer detected by sensor 12 (see FIG. 5c). Thereon, starts the constant-speed carriage to carry the card 10, wherein said constant-speed is kept until the leading end of card 10 is detected by sensor 24 (FIGs. 5c-5d).

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro A. Rojas whose telephone number is (571) 270-1618. The examiner can normally be reached on MON-FRI 7:30am - 5:00pm, alt. FRI EST Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Loke can be reached on (571) 272-1657. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pedro A Rojas

May 10, 2007



Lisa Caputo

Primary Patent Examiner



LISA CAPUTO
PRIMARY PATENT EXAMINER